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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/782,852

02/23/2004

Takahiro Goto

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EXAMINER

GILLIAM, BARBARA LEE

ART UNIT

PAPER NUMBER

1752

MAIL DATE

DELIVERY MODE

04/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/782,852	Applicant(s) GOTO, TAKAHIRO	
	Examiner Barbara L. Gilliam	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/16/2007, 1/23/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,7-10,13,14 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7-10,13,14 and 16-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/9/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 16, 2007 has been entered.

2. Claims 1, 4-10, 13-21 are pending. Claims 2-3, 11-12 are canceled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-5, 7-10, 13-14, 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over AOSHIMA et al. (EP 1 235 107 A1) in view of SHIMADA et al. (US 2001/0036598 A1).

a. In EP 1 235 107 A1, AOSHIMA et al. teach a photopolymerization composition that is cured with visible light or an infrared laser and is used as a recording

Art Unit: 1752

layer in a negative planographic printing plate precursor. The composition comprises a polymerizable compound having at least one radical-polymerizable ethylenically unsaturated double bond, a radical polymerization initiator, a binder polymer and a compound generating heat by infrared exposure (abstract). An onium salt, such as the sulfonium salt of formula (V), is preferred as the polymerization initiator ([0023]-[0033]). According to the teachings of AOSHIMA et al, it is preferable to select a linear organic polymer as the binder, which can be dissolved or swollen with water or an alkaline solution to enable development with water or an alkaline solution ([0035]-[0036]). Polymers containing a carboxyl group in the side chain are especially preferred. The weight average molecular of the binder polymer is 5,000 or more, preferably 10,000 to 300,000 ([0039]). The binder polymer is used in an amount of 20 to 95% by weight ([0041]). The compound generating heat by infrared exposure can be a dye or pigment such as the preferable cyanine dye and black pigments ([0043]-[0052]). The composition is coated on a support in an amount of 0.5 to 5.0 g/m² to make a planographic printing plate ([0064]-[0066]) which can be imaged using a laser which radiate infrared rays having a wavelength of 760 nm to 1200 nm ([0080]). An oxygen blocking protective layer can further be disposed on the photopolymerization composition layer ([0013]).

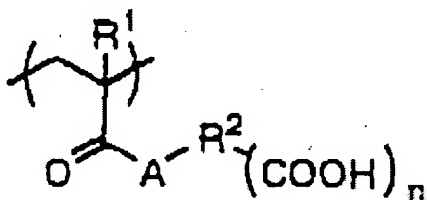
b. AOSHIMA et al. do not teach a compound having a weight average molecular weight of 3000 or less and having at least one carboxylic acid group however SHIMADA et al. teach a planographic printing plate comprising a polymerizable photosensitive layer wherein said layer can contain organic acids for the purpose of

Art Unit: 1752

improving stability, specifically phthalic acid ($C_6H_4(COOH)_2$: molecular weight of 166.14) ([0219]) which meets the present limitations for the compound having a molecular weight of 3000 or less. Therefore it would have been obvious to one of ordinary skill in the art to incorporate phthalic acid into the photopolymerization composition of AOSHIMA et al. in order to stabilize the photopolymerization composition.

5. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over AOSHIMA et al. (EP 1 235 107 A1) in view of SHIMADA et al. (US 2001/0036598 A1) as applied to claims 1, 4-5, 7-10, 13-14, 16-21 above, and further in view of OSHIMA (EP 1 176 467 A1).

a. AOSHIMA et al. clearly teaches binder polymers having a carboxylic group in the side chain and having a molecular weight of 5,000 or more, specifically 10,000 to 300,000 ([0035]-[0036], [0039], [0041]) however AOSHIMA et al. do not specifically teach the binder polymer of present claims 6 and 15. It would have been obvious to use the polymeric binder of OSHIMA,



in the photopolymerizable composition of AOSHIMA et al. with reasonable expectation of improving the printing durability ([0011]-[0013], [0035]).

Response to Arguments

6. In light of the claim amendments Applicant's arguments, filed February 16, 2007, with respect to the rejections of claims 1, 4-10, 13-21 under 35 USC 103(a) over AOSHIMA et al. (EP 1 235 107 A1) in view of ARIAS et al. (US 6,933,093B1) and further in view of OSHIMA (EP 1 176 467 A1) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection is made over AOSHIMA et al. (EP 1 235 107 A1) in view of SHIMADA et al. (US 2001/0036598 A1) and further in view of OSHIMA (EP 1 176 467 A1).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

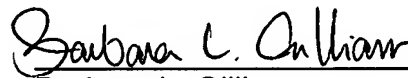
a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 1752

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barbara L. Gilliam
Primary Examiner
Art Unit 1752

bg
April 26, 2007